

### REMARKS

The Office Action of August 9, 2007 has been received and carefully reviewed. It is submitted that, by this Amendment, all bases of rejection are traversed and overcome. Upon entry of this Amendment, claims 12-19, 21-38 and 45-47 remain in the application. Claims 1-11, 20, and 39-44 are cancelled herein. Reconsideration of the claims is respectfully requested.

Applicants acknowledge and appreciate the Examiner's withdrawal of the species restriction of April 19, 2007 with respect to claims 8, 32, 15, 26 (Applicants assume the Examiner meant claim 18 instead of claim 26, which was subject to the species restriction), 27 and 42.

Claims 45 and 46 were originally restricted out as being part of Group II, which was elected by the Applicants. However, these claims were not addressed by the Examiner in the Office Action dated August 9, 2007. Applicants have amended independent claim 45 similarly to independent claim 12 (discussed further hereinbelow), and submit that claims 45 and 46 are allowable for the reasons set forth below.

Claims 12-15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Gidaspow et al (U.S. Patent No. 3,823,038).

Applicants have amended claim 12 to recite that the needle is adapted to enter a fuel cartridge having a housing defining an enclosed space and having an open end, wherein the housing includes a first chamber adapted to contain fuel; a second chamber adapted to receive gaseous fuel, the second chamber being separated from the first chamber by a chamber-separating septum adapted to receive the needle, the chamber-separating septum being permeable to the gaseous fuel; and a septum covering the open end, wherein the septum covering the open end is adapted to receive the needle. Independent claim 47 has been similarly amended.

This is in sharp contrast to the teachings of Gidaspow. The fuel cell of Gidaspow does include an input line **1** for directing fuel into the fuel cell (see Fig. 1 of Gidaspow). However, it is submitted that Gidaspow does not teach or suggest that the input line **1** is adapted to enter a fuel cartridge including two chambers and a septum which receives the input line **1** (such as the fuel cartridge defined in Applicants' revised claim 12).

The Examiner directs the Applicants' attention to Figures 3a and 3b of Gidaspow, and suggests that these Figures somehow teach or suggest the fuel cartridge (including the housing, chambers and septum) of Applicants' revised claim 12. Applicants strongly disagree with the Examiner's assertion. Figures 3a and 3b of Gidaspow illustrate a bleed tube **11** which allows bleed gases to exit the fuel cell through opening **20** (Fig. 3a) or the openings in end plugs **17, 18** (Fig. 3b) (see Col. 9, lines 38-60). In fact, Gidaspow specifically states that the continuous bleed tube **11** is located on the electrode chamber **10** "at the end opposite the reactant gas input end" (see Col. 9, lines 18-20). As such, the fuel cell of Gidaspow has an input line **1** at one end and a bleed tube **11** at an opposite end.

In sharp contrast to the Examiner's assertion, the configurations of the bleed tube **11** of Gidaspow's Figs. 3a and 3b are not the same, nor do they render obvious, the fuel cartridge defined in Applicants' pending claims. In fact, the configurations shown in Gidaspow's Figs. 3a and 3b are embodiments for **gas exiting** the fuel cell, NOT for gaseous fuel entering the fuel cell. This is in sharp contrast to Applicants' fuel cartridge as recited in the pending claims, which receives the needle of the fuel cell to supply fuel thereto.

As such, it is submitted that Applicants' invention as defined in independent claim 12 (and in similarly revised claims 45 and 47), and in those claims depending ultimately therefrom, is not anticipated, taught or rendered obvious by Gidaspow, either alone or in combination, and patentably defines over the art of record.

Claims 16-18, 20-29, 33, 34, 36 and 37 stand rejected under 35 U.S.C. § 103(a) as being anticipated by Gidaspow in view of Nakanishi et al. (U.S. Patent No. 6,475,655). Claims 19, 35, 38 and 47 stand rejected under 35 U.S.C. § 103(a) as being anticipated by Gidaspow in view of Nakanishi, and further in view of Adams et al. (U.S. Patent Pub. No. 2005/0118468). Claims 30-32 stand rejected under 35 U.S.C. § 103(a) as being anticipated by Gidaspow in view of Nakanishi, and further in view of Hockaday et al. (U.S. Patent Pub. No. 2002/0182459).

The Applicants reiterate the arguments previously made regarding Gidaspow, and further submit that none of the secondary references (i.e., Nakanishi, Adams or Hockaday) supply the deficiencies regarding the fuel cartridge defined in Applicants' independent

claims. Nakanishi teaches a system for hydrogen gas separation which includes multiple tubes and palladium alloys. Adams teaches a hollow cartridge having a valve for releasing fuel. Hockaday teaches a system of two ampoules configured to generate hydrogen gas. However, none of these references teaches or suggests the fuel cartridge (including two chambers and a septum) adapted to receive the needle as defined in Applicants' independent claims 12, 45 and 47.

For all the reasons stated above, it is submitted that Applicants' invention as defined in independent claims 12, 45 and 47, and in those claims depending ultimately therefrom, is not anticipated, taught or rendered obvious by the Gidaspow, Nakanishi, Adams and Hockaday references, either alone or in any combination, and patentably defines over the art of record.

In summary, claims 12-19, 21-38 and 45-47 remain in the application. It is submitted that, through this Amendment, Applicants' invention as set forth in these claims is now in a condition suitable for allowance. Further and favorable consideration is requested. If the Examiner believes it would expedite prosecution of the above-identified application, the Examiner is cordially invited to contact Applicants' Attorney at the below-listed telephone number.

Respectfully submitted,

DIERKER & ASSOCIATES, P.C.

/Julia Church Dierker/

Julia Church Dierker  
Attorney for Applicants  
Registration No. 33368  
(248) 649-9900, ext. 25  
juliad@troypatent.com

3331 West Big Beaver Rd., Suite 109  
Troy, Michigan 48084-2813

Dated: November 8, 2007  
JCD/JRK